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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/091,044	03/04/2002	Timothy J. Shepodd	SD-8345	6501

7590

05/27/2003

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EXAMINER

THEXTON, MATTHEW

ART UNIT

PAPER NUMBER

1714

DATE MAILED: 05/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/091,044

Applicant(s)

SHEPODD ET AL.

Examiner

Matthew A. Thexton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sheppold, et al. (US 5624598) in view of Streitwieser, Jr., et al. and Morikawa, et al. (US 6018018).

The Sheppold reference discloses the general application of getting hydrogen using an appropriately matched hydrogenation catalyst and hydrogenation susceptible compound. Further, the reference discloses systems which employ high surface area carriers and/or binders and fillers to permit utility in various environments. This reference teaches all of the elements of all of the claims except for the particular hydrogenation susceptible compound, the polyphenyl ether.

The Streitwieser reference discusses the well known catalytic hydrogenation chemistry of substituted benzenes, setting forth the caveat that some functional groups will hydrogenate preferentially, including "COR" which is an ether.

The Morikawa reference discloses catalytic hydrogenation of phenyl ether to saturate the aromatic portion (column 9, line 39 and 43) and employs temperatures up to 300 degree Celsius (column 12, lines 20-33). The ethers suggested in Morikawa actually are derivatives of benzene, since it is the aromatic functionality which is the focus of the hydrogenation (column 9, lines 17-20). In view of Morikawa et al., the Streitwieser, Jr., et al. caveat is not a counter suggestion when the ether is bis-phenyl.

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In view of the references taken together, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed poly-phenyl ethers as catalytic hydrogenation compounds in the techniques taught by Sheppard et al. in order to obtain their higher temperature stability and with a reasonable expectation of success.

Response to Amendment

Applicant's amendment received 8 May 2003 modified claim 1 to include a limitation that the polyphenyl ether is comprised of at least 3 basic structural units. While this is different than the bis-phenyl ether specifically set forth in Morikawa et al., it is clear that the Morikawa reference stands for all its teachings, not just the exemplified or listed species. Poly-phenyl ether is so structurally similar to diphenyl ether and it suggested by the broad class of compounds "benzene and its derivatives" (column 9, lines 19-20) that it would be obvious to one of ordinary skill in the art.

Applicant's comments regarding the reference Kawamoto are rendered moot by the deletion of this reference from the statement of rejection.

Applicant's comments regarding the reference Morikawa are noted but not found to be persuasive. While Morikawa et al. teach hydrogen partial pressure of about one atmosphere or higher, it is not a point of distinction for the claimed compositions. There is no hydrogen pressure present in the claims. In essence, applicant is urging that a previously unknown and unobvious property of the composition is the basis for patentability. However, it is well established that new uses or properties do not lend patentability to otherwise old or obvious compositions.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew A. Thexton whose telephone number is 703-305-5085. The examiner can normally be reached on Monday-Friday, 8:30 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasudevan S Jagannathan can be reached on 703-306-2777. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

A handwritten signature in black ink, appearing to read "MA Thexton".

Matthew A. Thexton
Primary Examiner
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May 23, 2003